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EXAMINER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/609,348 | BALSIGER ET AL. | |
| | Examiner | Art Unit | |
| | ISAAC T. TECKLU | 2192 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-43 have been reexamined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnston (US 6,104,391).

As per claim 1, Johnston discloses in a computer system that supports a visual user interface development (e.g. FIG. 11 and related text), a method of centrally managing user interface state information for the visual user interface development tool (e.g. FIG. 4 and related text) such that behavior for one or more user interface components or the visual user interface development tool itself may be defined dynamically at development time (e.g. Fig. 2D-2E and related text), the method comprising acts of:

receiving a message generated within the visual user interface development tool (col. 25:15-25 "... messages 120 are sent to the appearance ..." and e.g. FIG. 14, 120 and);

sending the message to be checked against a centralized extensible behavior stack for one or more behaviors to use in processing the message (col. 10: 20-25 "... change the appearance or behavior of a single item in the menu ..." and col. 21:55-65 "... abstracting appearance and behavior of a user interface from its functionality ..." and e.g. FIG. 14, 122 and related text);

checking the centralized extensible behavior stack containing currently available behaviors for processing messages to determine if a behavior is available (col. 10:25-40 "... if the menu item ... behavior has been customized ... then the theme's menu drawing ..." and e.g. FIG. 6, Q2 and related text); and

if a behavior is available on the centralized extensible behavior stack, then passing the message to the available behavior for processing (col. 5:1-15 "... capability to alter the appearance and behavior of object and object parts ..." and e.g. FIG. 15, 128 –136 and related text)).

As per claim 2 (Currently Amended), Johnston discloses a method as recited in claim 1, wherein the behavior is available on the centralized extensible behavior stack, and wherein the behavior is associated with the visual user interface development tool, as opposed to an individual user interface component within the visual user interface development tool (e.g. FIG. 4, 50 and related text).

As per claim 3 (Currently Amended), Johnston discloses a method as recited in claim 1, wherein the behavior is available on the centralized extensible behavior stack (col. 10:25-40 "... if the menu item ... behavior has been customized ... then the theme's menu drawing ..." and e.g. FIG. 6, Q2 and related text), and wherein the behavior is associated with an individual user interface component within the visual user interface development tool, as opposed to the visual user interface development tool itself (col. 9:1-10 "... each behavior is associated with ..." and e.g. Figure 3 and related text).

As per claim 4, Johnston discloses a method as recited in claim 3, wherein the individual user interface component comprises a third party component developed separately from the visual user interface development tool (col. 11:10-25 "... graphic subsystem is used by the system to draw the pattern ..." and e.g. Figure 3,30 and related text).

As per claim 5, Johnston discloses a method as recited in claim 3, wherein the behavior comprises asking the individual user interface component for any glyphs that are part of the individual user interface component (e.g. FIG. 5 and related text).

As per claim 6, Johnston discloses a method as recited in claim 1, further comprising acts of: receiving the behavior from a component within the visual user interface development tool during development time; and pushing the behavior on the centralized behavior stack (col. 10:25-40 "... if the menu item ... behavior has been customized ... then the theme's menu drawing ..." and e.g. FIG. 6 and related text).

As per claim 7 (Currently Amended), Johnston discloses a method as recited in claim 1, wherein no behavior is available on the centralized extensible behavior stack for processing the message, the method further comprising an acts of: checking for a successfully hit tested glyph with a corresponding glyph behavior for the message (col. 10: 20-25 "... change the appearance or behavior of a single item in the menu ..." and col. 21:55-65 "... abstracting appearance and behavior of a user interface from its functionality ..." and e.g. FIG. 14, 122 and related text).

As per claim 8, Johnston discloses a method as recited in claim 1, further comprising an act of receiving one or more glyphs with corresponding glyph behavior from a component within the visual user interface development tool during development time, wherein each of the one or more glyphs is capable of hit testing and painting itself (e.g. FIG. 5 and related text).

As per claim 9, this is the program product version of the claimed method discussed above (Claim 1), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 10, this is the program product version of the claimed method discussed above (Claim 3), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 11, Johnston discloses a computer program product as recited in claim 9, the method further comprising acts of: receiving the behavior from a component within the visual user interface development tool during development time; and pushing the behavior on the

centralized behavior stack (col. 10:25-40 "... if the menu item ... behavior has been customized ... then the theme's menu drawing ...") and e.g. FIG. 6 and related text).

As per claim 12, Johnston discloses a computer program product as recited in claim 11, wherein the behavior corresponds to a particular action either being performed or to be performed on a user interface component within the visual user interface development tool, the method further comprising an act of popping the behavior off the centralized behavior stack when the particular action is completed (e.g. FIG. 7 and related text).

As per claim 13, Johnston discloses a computer program product as recited in claim 12, wherein the centralized behavior stack enforces the existence of a single state for the particular action (col. 10:25-40 "... if the menu item ... behavior has been customized ... then the theme's menu drawing ...") and e.g. FIG. 6 and related text).

As per claim 14, this is the program product version of the claimed method discussed above (Claim 7), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 15, this is the program product version of the claimed method discussed above (Claim 8), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 16, Johnston discloses computer program product as recited in claim 9 wherein the visual user interface development tool comprises an adorer window that intercepts all messages directed to the visual user interface development tool (e.g. FIG. 5 and related text).

As per claim 17, Johnston discloses a computer program product as recited in claim 16, wherein the one or more glyphs are organized into one or more adorer layers (col. 10:25-40 “... if the menu item ... behavior has been customized ... then the theme’s menu drawing ...” and e.g. FIG. 6 and related text).

As per claim 18, Johnston discloses a computer program product as recited in claim 17, the method further comprising an act of disabling at least one of the one or more adorer layers (e.g. FIG. 5 and related text).

As per claim 19, this is method version of the claimed the program product discussed above (Claim 9), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 20, this is method version of the claimed the program product discussed above (Claim 10), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 21, Johnston discloses a method as recited in claim 19, further comprising: an act of receiving the behavior from a component within the visual user interface development

tool during development time; and a step for adding the behavior to the extensible behavior store (col. 10:25-40 "... if the menu item ... behavior has been customized ... then the theme's menu drawing ...") and e.g. FIG. 6 and related text).

As per claim 22, this is method version of the claimed the program product discussed above (Claim 14), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 23, Johnston discloses a method as recited in claim 22, wherein no successfully hit test glyph with corresponding glyph behavior is available for the message (col. 10:25-40 "... if the menu item ... behavior has been customized ... then the theme's menu drawing ...") and e.g. FIG. 5 and related text).

As per claim 24, this is method version of the claimed the program product discussed above (Claim 15), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 25, Johnston discloses method as recited in claim 19, wherein the message comprises one of a user event, a mouse message, and a keyboard message (col. 25:15-25 "... messages 120 are sent to the appearance ..." and e.g. FIG. 14, 120 and).

As per claim 26, Johnston discloses a method as recited in claim 19, wherein the centralized and extensible behavior store contains all currently available behaviors (col. 25:15-25 "... messages 120 are sent to the appearance ..." and e.g. FIG. 14, 120 and).

As per claim 27, this is computer program version of the claimed the method discussed above (Claim 19), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 28, this is computer program version of the claimed the method discussed above (Claim 20), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 29, this is computer program version of the claimed the method discussed above (Claim 21), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 30, this is computer program version of the claimed the method discussed above (Claim 22), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 31, Johnston discloses a computer program product as recited in claim 27, wherein the behavior defines a new custom behavior previously unavailable within the visual user interface

As per claim 32, this is computer program version of the claimed the method discussed above (Claim 24), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Johnston.

As per claim 33, Johnston discloses a computer program product as recited in claim 32, wherein the one or more glyphs are organized into one or more adorning layers (e.g. FIG. 5 and related text).

As per claim 34, Johnston discloses a computer program product as recited in claim 33, the method further comprising an act of disabling at least one of the one or more adorning layers (e.g. FIG. 5 and related text).

As per claim 35, Johnston discloses a computer program product as recited in claim 32, wherein the one or more glyphs comprise at least one custom glyph for the component (e.g. FIG. 5 and related text).

As per claim 36, Johnston discloses a computer program product as recited in claim 32, wherein the message corresponds to at least one of a hit test message and a paint message (col. 25:15-25 "... messages 120 are sent to the appearance ..." and e.g. FIG. 14, 120 and).

As per claim 37 (Currently Amended), Johnston discloses a computer program product comprising one or more computer readable media carrying computer executable instructions that centralizes component behavior for a visual user interface development tool and permits a component to define at development time one or more custom behaviors that are specific to the component itself or applicable the visual user interface development tool, the computer executable instructions comprising:

an extensible behavior stack that contains one or more development time specified behaviors for the visual user interface development tool or a component within the visual user interface development tool (col. 10:25-40 "... if the menu item ... behavior has been customized ... then the theme's menu drawing ..." and e.g. FIG. 6 and related text), wherein a behavior describes how the user interface development tool or component within the visual interface development tool interacts with a user (col.4:50-60 and FIG. 11 and related text);

a extensible collection of one or more adorners, each containing one or more development time specified glyphs capable hit testing and painting themselves, wherein at least one of the one or more glyphs includes a reference to a glyph behavior to invoke when a successful hit test has been determined (col. 10:25-40 "... if the menu item ... behavior has been customized ... then the theme's menu drawing ..." and e.g. FIG. 6, Q2 and related text);
and

a message router that routes one or more received messages generated in response to user input within a visual user the visual interface development tool to either the extensible behavior stack or the extensible collection of one or more adorners (col. 25:15-25 "... messages 120 are sent to the appearance ..." and e.g. FIG. 14, 120 and).

As per claim 38, Johnston discloses a computer program product as recited in claim 37, the computer executable instructions further comprising an adorning window that intercepts one or more messages directed to the visual user interface development tool (col. 10:25-40 "... if the menu item ... behavior has been customized ... then the theme's menu drawing ..." and e.g. FIG. 6, Q2 and related text).

As per claim 39, Johnston discloses a computer program product as recited in claim 37, wherein the message router routes a received user event message, a received mouse message, or a received keyboard message to the extensible behavior stack (paragraph [0030] "... using a drag-and-drop ..." and paragraph [0068] "... decrease in size and moved ..." and paragraph [0059] "... selected glyph ...").

As per claim 40, Johnston discloses a computer program product as recited in claim 37, wherein the message router routes a received a received hit test message or a received paint message to the extensible collection of one or more adorners (e.g. FIG. 5 and related text).

As per claim 41, Johnston discloses a computer program product as recited in claim 37, wherein the one or more adorners organize the one or more development time specified glyphs into layers which can be independently disabled and enabled (col. 10:25-40 "... if the menu item ... behavior has been customized ... then the theme's menu drawing ..." and e.g. FIG. 6, Q2 and related text).

As per claim 42, Johnston discloses a computer program product as recited in claim 37, wherein the component within the visual user interface development tool comprises a third party component developed separately from the visual user interface development tool (e.g. FIG. 3 and related text).

As per claim 42 (New), Johnston discloses a method as recited in claim 1, wherein the dynamically defined behavior is directly related to at least one functionality of the interface component selected from the group comprising: dragging an object, resizing an object, and selecting an object (col. 25:15-25 "... messages 120 are sent to the appearance ..." and e.g. FIG. 5 and).

Response to Arguments

8. Applicant's arguments filed 03/28/2008 have been fully considered but they are not persuasive.

The Applicant asserted that “the cited art is not directed to a visual user interface development tool, and the referenced passage cited as teaching ‘receiving a message generated within a visual user interface development tool’ are referring to switching themes at run time, not development time as required by the full claim.” (Page 15 of 16).

The examiner respectfully disagrees that Johnston Jr. teaches an improved visual appearance can be provided to GUIs by providing an appearance management layer that gives users (both application developers and end users) the ability to customize the appearance and behavior of the desktop. This layer can be provided between all of the clients, e.g., applications, the end user, definition procedures, and the graphic subsystem which actually writes to the display. In this way, a level of abstraction is provided between the client and the system so that customization can be facilitated without requiring the client to have a detailed knowledge of the interface environment, which may be constantly changing (col.3:25-45). Furthermore, Johnston Jr. teaches that when a utility creates a new interface object using a drawing procedure it will also load an appropriate stub resource and store its value in a procedure handle field of the object's data structure. Since the utilities can switch the drawing procedure that they call, the ability to dynamically change the set of drawing procedures which create the interface objects is now available (col.7:40-50). Thus, Johnston Jr. does teach visual user interface development tool. Accordingly, the above argument is not persuasive. (emphasis added).

The Applicant asserted that “the use of the term behavior within the cited art is different than in the present claims.” (Page 15 of 16).

Examiner disagrees with the above assertion. As recited in claim 37, “behavior describes how the user interface development tool or component within the visual user interface development tool interacts with a user.” Thus, the functionality of the behavior is how the user interface development tool or component within the visual user interface development tool interacts with a user. Johnston Jr. teaches “these windows and window parts exhibit a behavior when acted on by a user which is distinct from the underlying function of these objects, i.e., when a user clicks on a close button using a mouse, the button becomes shaded in such a way that it appears depressed prior to the window actually closing. These are termed functional attributes” (col.4:60-67). Furthermore, Johnston, Jr. teaches “comparison of the conventional user interface screen shown in FIG. 2C with user interface screens using different themes shown in FIGS. 2D and 2E is an excellent starting point toward understanding the powerful capabilities for appearance and behavior change in user interfaces according to the present invention. Note, for example, the difference in appearance between the "Views" title bar in FIG. 2C as opposed to those of FIGs. 2D and 2E” (col.5:21-29, emphasis added). Therefore, the term behavior describes how the user interface tool interacts with the user.

The Applicant asserted that “Johnston teach how to modify appearance and behavior without modifying functionality. However, the current claimed embodiments are directed to dynamically changing the behavior, or underlying functionality, of the glyphs.” (Page 15 of 16).

Examiner disagrees with the above assertion. Johnston Jr. also teaches “given all of the graphical and audio artistry available today for GUIs, one can easily imagine the wide variety of desktop "looks" which can be developed once the system's control over the appearance and behavior of interface objects is relaxed. Comparison of the conventional user interface screen shown in FIG. 2C with user interface screens using different themes shown in FIGS. 2D and 2E is an excellent starting point toward understanding the powerful capabilities for appearance and behavior change in user interfaces according to the present invention” (col.5:21-29, emphasis added). Furthermore, Johnston, Jr. teaches the window and its parts also have associated therewith one or more functions which are invoked when a user provides an associated input, e.g., clicking on a close button or box causes the window to close. These are termed functional attributes (col.4:50-60, emphasis added). Furthermore, “in FIG. 11, a pop-up, pull-down or drop-down menu 140 allows users to specify an overall appearance/behavior by selecting the theme to be installed. Beneath the theme setting box 140 to the left is an options area 142 in which a user may select various options within each theme (changing how the user interface development tool interacts with a user). For example, a user could specify a background color, a font and a highlight color. To the right of the options area 142, is a preview area 144 where exemplary interface elements of the theme currently selected in box 140 are shown so that a user can preview what the theme will look like before making a selection (presenting how the

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user interface development tool interacts with a user). Exemplary interface elements can include, for example, a desktop pattern, a menu bar and menu, an active window, and a dialog box with radio buttons, a checkbox, push buttons, and selected text. Using the appearance control panel, a user will be able to change the appearance of the desktop quickly and easily” (col.22:45-67, emphasis added). Therefore, by dynamically changing the appearance and/or behavior of the functional attributes would require how the user to interact accordingly (different behavior) with the changed functionality of the attributes/objects in the user interface. Thus, the above argument is not persuasive. Accordingly, examiner respectfully maintains the previous ground of rejection.

Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISAAC T. TECKLU whose telephone number is (571)272-7957. The examiner can normally be reached on M-TH 9:300A - 8:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Isaac T Tecklu/

Examiner, Art Unit 2192

/Tuan Q. Dam/

Supervisory Patent Examiner, Art Unit 2192